

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2015/2016

### TMX 7011 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

( All sections / Groups )

23 SEPTEMBER 2015  
8.00 p.m. – 10.00 p.m.  
(2 HOURS)

#### INSTRUCTIONS TO STUDENTS

1. This Question paper consists of **9 pages (including this page)**.
2. Choose **FOUR** out of FIVE questions.
3. Please **WRITE ALL YOUR ANSWERS IN THE QUESTION PAPER ITSELF** in the space allocated.

**Question 1**

- (a) A group meeting is sometimes suggested as a useful compromise between interviews and questionnaires. In such a group meeting, a systems analyst meets with and asks questions to a number of users at one time. Discuss TWO advantages and TWO disadvantages of such a group meeting. [4 marks]

- (b) System development life cycle (SDLC) is a methodology used to develop, maintain, and update information system. Discuss TWO different approaches that could be used to improve system development. [4 marks]

**Continued...**

- (c) What would be the factors for outsourcing part or whole system development to Information Technology Services Firm? Give TWO factors. [2 marks]


[illegible]

### Question 2

- (a) "Functionality is one of the factors to consider in choosing off-the-shelf software".

Discuss the above statement.

[2 marks]



**Continued...**

- (b) Assume you have a project with TEN activities labelled A-J as shown below. Construct a network diagram based on the notation given below. For each activity, calculate its Early Finish (EF) and Late Finish (LF). Show/highlight the critical path on your network diagram. [8 marks]

Activity	Estimated Time (days)	Preceding task
A	4	-
B	5	A
C	6	A
D	7	A
E	6	A, D
F	5	C, E
G	4	D, E
H	3	E
I	4	F, G
J	5	H, I

Activity	Estimated Time
Early Finish	Late Finish

Continued...

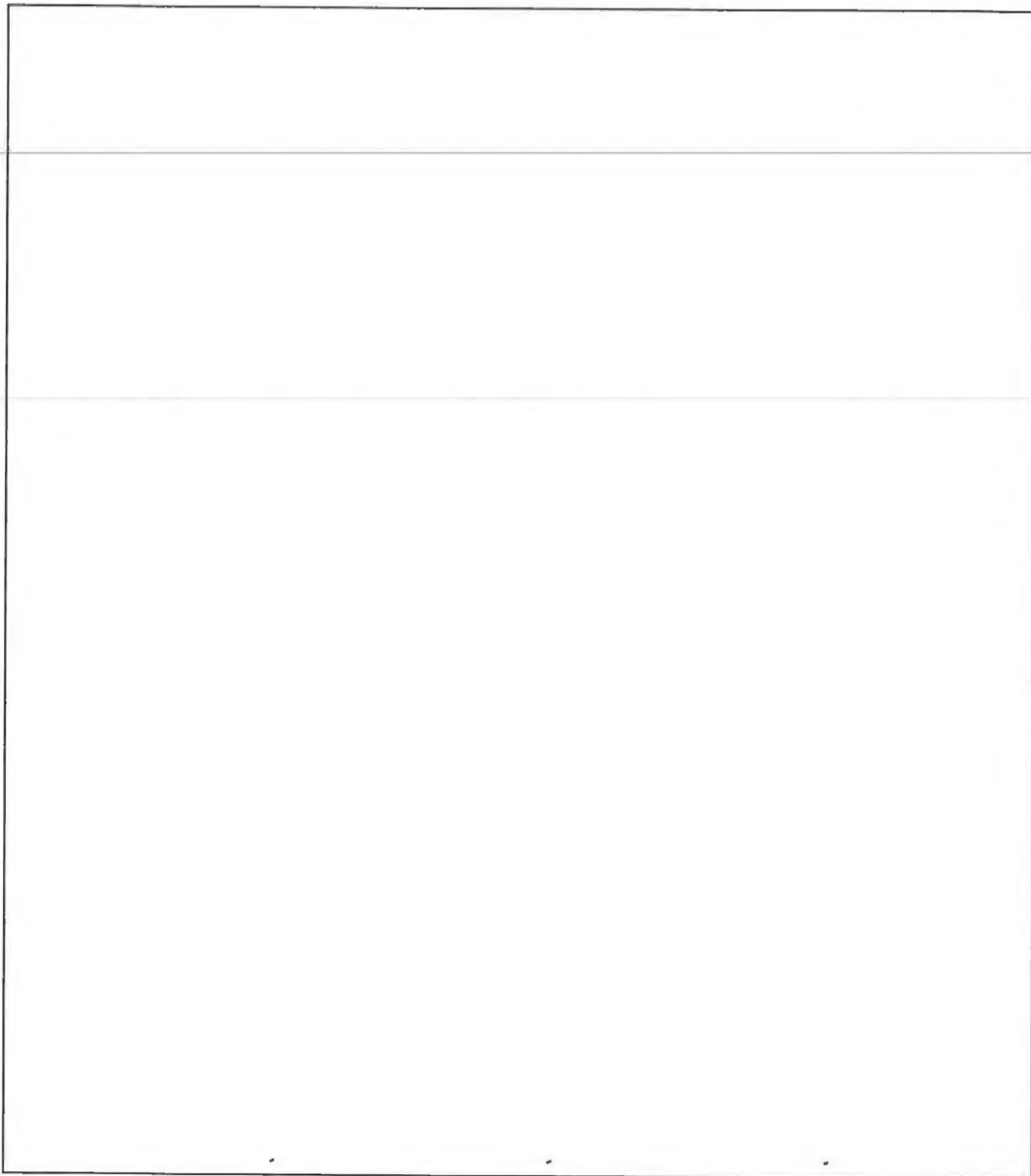
**Question 3**

- (a) Draw an Data Flow Diagram (DFD) based on the following scenario:

Exabot.com is a company that sells robotic vacuum cleaner. When a customer places orders on the company's web site, the system checks to see if the items are in stock, issues a status message to the customer, and generates a shipping order to the warehouse, which fills the order. When the order is shipped, the customer is billed. The system also produces reports to the manager.

- i) Draw a context DFD diagram for the order system.

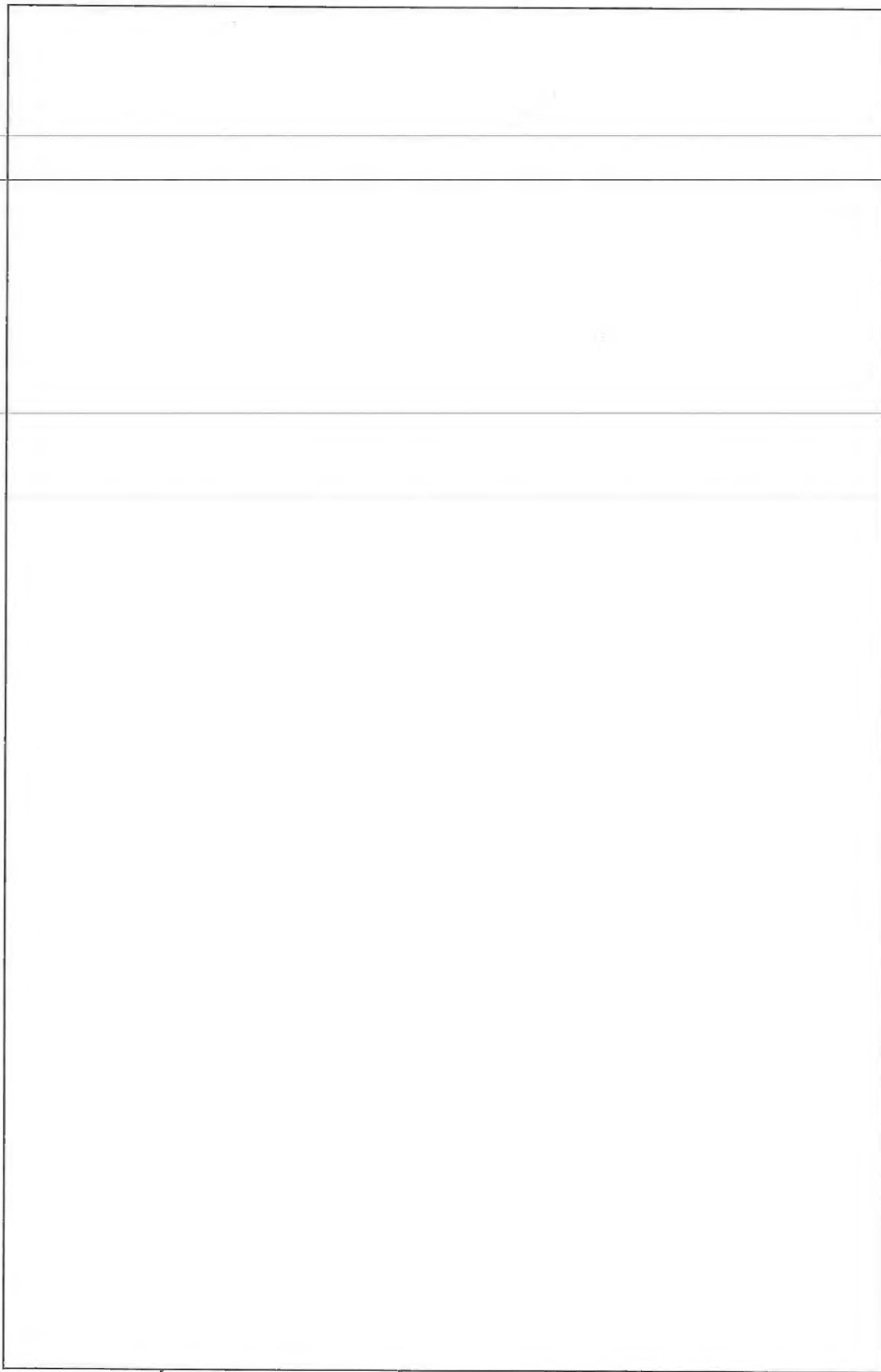
[4 marks]



Continued...

ii) Draw a Level-0 DFD diagram for the order system

[6 marks]

A large empty rectangular box with a black border, intended for drawing a Level-0 Data Flow Diagram (DFD) for an order system. The box is positioned in the center of the page and is currently blank.

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### Question 4

- (a) What is top-down planning approach? Identify TWO advantages of the top-down planning approach over other planning approaches

[4 Marks]

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- (b) Give THREE drawbacks of using prototyping as a requirements determination tool. [3 marks]

[3 marks]

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(c) Based on the given unnormalized STUDENT record below, normalize it into 3NF relations.

Student_number	Student_name	Total_credits	GPA	Course_number	Course_description	Grade
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[3 marks]

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### Question 5

(a) For a technical report, when should you use tables? When should you use graphs?  
[4 marks]

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Continued...



- (b) Briefly describe the FOUR types of information system installation. [4 marks]

- (c) What are the deliverables at the end of the maintenance phase of SDLC? [2 marks]

**End of Paper**